

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) In a pecan processing facility having a cracker producing a primary cracker product feeding a width separation device, and the cracker also producing a secondary cracker product, a method of operating the pecan processing plant comprising:

separating the secondary cracker product by weight into a lighter portion, and a heavier portion; and then

applying the heavier portion to the width separation device.

2. (Original) The method of operating a pecan processing plant as defined in claim 1 further comprising:

transporting the secondary cracker product to a separation device by:

moving air through a conduit; and

carrying the secondary cracker product in the air moving through the conduit to the separation device.

3. (Original) The method of operating a pecan processing plant as defined in claim 2 wherein moving air through the conduit further comprises creating a vacuum within the conduit.

4. (Currently Amended) The method of operating a pecan processing plant as defined in claim 3 wherein moving air through a conduit further comprises moving air ~~through~~ through a conduit having a substantially circular cross-section.

5. (Original) The method of operating a pecan processing plant as defined in claim 2 wherein separating the secondary cracker product by weight into a lighter portion and a heavier portion further comprises:

forcing the secondary cracker product and air downward;
counter-flowing air upward through the secondary cracker product;
carrying the lighter portion with the counter-flowing air; and
allowing the heavier portion to fall to an air lock.

6. (Original) The method of operating a pecan processing plant as defined in claim 1 further comprising disposing of the lighter portion of the secondary cracker product.

7.-19. (Cancelled)

20. (Currently Amended) A method of operating a pecan shelling plant comprising:

cracking pecans to produce a cracker product stream;
sizing the cracker product stream into a plurality of width graduations;
sorting uncracked pecans from substantially whole cracked pecans of a largest width
graduation; and
returning ~~substantially only~~ the uncracked pecans to the cracker.

21. (Original) The method of operating a pecan shelling plant as defined in claim 20 further comprising, before the sorting step, shelling the largest width graduation to further break shells of cracked pecans, and pass unaffected uncracked pecans.

22. (Original) The method of operating a pecan shelling plant as defined in claim 21 wherein shelling the largest width graduation further comprises passing the largest width graduation through a pair of substantially parallel rotating rubber coated cylinders adjusted to further shell cracked pecans and pass unaffected uncracked pecans.

23. (Original) The method of operating a pecan shelling plant as defined in claim 20 wherein sorting the uncracked pecans from the largest width graduation further comprises:

sorting the largest width graduation by thickness into a thicker range comprising uncracked pecans and substantially whole cracked pecans; and

separating the uncracked pecans from the thicker range.

24. (Currently Amended) A method of operating a pecan shelling plant comprising:

cracking pecans to produce a cracker product stream;

sizing the cracker product stream into a plurality of width graduations;

sorting a largest width graduation by thickness into a thicker range comprising uncracked pecans and substantially whole cracked pecans;

~~The method of operating a pecan shelling plant as defined in claim 23 wherein separating the uncracked pecans from the thicker range further comprises~~

applying the thicker range to a pin sorter which separates the uncracked pecans from the substantially whole cracked pecans; and

returning substantially only the uncracked pecans to the cracker.

25. (Original) The method of operating a pecan shelling plant as defined in claim 23 further comprising returning the substantially whole cracked pecans to the sizing step.

26.-33. (Cancelled)

34. (Currently Amended) A method of operating a pecan processing plant comprising:
cracking pecans to produce a primary cracker product and a secondary cracker product;
separating the secondary cracker product by weight into a lighter portion comprising shells and dust, and a heavier portion comprising pecan meat;
sizing the heavier portion of the secondary cracker product and the primary cracker product into a plurality of width graduations;
sorting uncracked pecans from substantially whole cracked pecans of a largest width graduation; and
returning ~~substantially only~~ the uncracked pecans to the cracker.

35. (Original) The method of operating a pecan processing plant as defined in claim 34 further comprising:
transporting the secondary cracker product to a weight separation device by:
moving air through a conduit; and
carrying the secondary cracker product in the air moving through the conduit to the weight separation device.

36. (Original) The method of operating a pecan processing plant as defined in claim 35 wherein moving air through the conduit further comprises creating a vacuum within the conduit.

37. (Original) The method of operating a pecan processing plant as defined in claim 36 wherein moving air through the conduit further comprises moving air through the conduit having a substantially circular cross-section.

38. (Original) The method of operating a pecan shelling plant as defined in claim 34 further comprising, before the sorting step, shelling the largest width graduation further cracking cracked pecans and passing unaffected uncracked pecans.

39. (Original) The method of operating a pecan shelling plant as defined in claim 38 wherein shelling the largest width category further comprises passing the largest width graduation through a pair of substantially parallel rubber coated cylinders rotating substantially along the pull of gravity as measured between them, and wherein the spacing between the pair of rubber coated cylinders is such that uncracked pecans pass through unaffected.

40. (Original) The method of operating a pecan shelling plant as defined in claim 34 wherein sorting the uncracked pecans from the largest width graduation further comprises:

 sorting the largest width graduation by thickness into a thicker range comprising uncracked pecans and substantially whole cracked pecans; and

 sorting the thicker range into uncracked pecans and substantially whole cracked pecans.

41. (Currently Amended) A method of operating a pecan processing plant comprising:
cracking pecans to produce a primary cracker product and a secondary cracker product;
separating the secondary cracker product by weight into a lighter portion comprising
shells and dust, and a heavier portion comprising pecan meat;
sizing the heavier portion of the secondary cracker product and the primary cracker
product into a plurality of width graduations;
sorting the largest width graduation by thickness into a thicker range comprising
uncracked pecans and substantially whole cracked pecans;
~~The method of operating a pecan shelling plant as defined in claim 40 wherein sorting the~~
~~thicker range further comprises~~
applying the thicker range to a pin sorter which separates the uncracked pecans from the
substantially whole cracked pecans; and
returning substantially only the uncracked pecans to the cracker.

42. (Original) The method of operating a pecan shelling plant as defined in claim 40 further
comprising returning the substantially whole cracked pecans to the sizing step.

43.-61 (Cancelled)

62. (Currently Amended) In a nut processing facility having a cracker producing a primary
cracker product feeding a width separation device, and the cracker also producing a secondary
cracker product, a method of operating the nut processing plant comprising:

separating the secondary cracker product by weight into a lighter portion, and a heavier portion; and then

applying the heavier portion to the width separation device.

63. (Original) The method of operating a nut processing plant as defined in claim 62 further comprising:

transporting the secondary cracker product to a separation device by:

moving air through a conduit; and

carrying the secondary cracker product in the air moving through the conduit to the separation device.

64. (Original) The method of operating a nut processing plant as defined in claim 63 wherein moving air through the conduit further comprises creating a vacuum within the conduit.

65. (Currently Amended) The method of operating a nut processing plant as defined in claim 64 wherein moving air through a conduit further comprises moving air ~~through~~ through a conduit having a substantially circular cross-section.

66. (Original) The method of operating a nut processing plant as defined in claim 64 wherein separating the secondary cracker product by weight into a lighter portion and a heavier portion further comprises:

forcing the secondary cracker product and air downward;

counter-flowing air upward through the secondary cracker product;

carrying the lighter portion with the counter-flowing air; and
allowing the heavier portion to fall to an air lock.

67. (Original) The method of operating a nut processing plant as defined in claim 66 further comprising disposing of the lighter portion of the secondary cracker product.

68. (Currently Amended) A method of operating a nut shelling plant comprising:
cracking nuts to produce a cracker product stream;
sizing the cracker product stream into a plurality of width graduations;
sorting uncracked nuts from substantially whole cracked nuts of a largest width
graduation; and
returning substantially only the uncracked nuts to the cracker.

69. (Original) The method of operating a nut shelling plant as defined in claim 68 further comprising, before the sorting step, shelling the largest width graduation to further break shells of cracked nuts, and pass unaffected uncracked nuts.

70. (Original) The method of operating a nut shelling plant as defined in claim 69 wherein shelling the largest width graduation further comprises passing the largest width graduation through a pair of substantially parallel rotating rubber coated cylinders adjusted to further shell cracked nuts and pass unaffected uncracked nuts.

71. (Original) The method of operating a nut shelling plant as defined in claim 68 wherein sorting the uncracked nuts from the largest width graduation further comprises:

 sorting the largest width graduation by thickness into a thicker range comprising uncracked nuts and substantially whole cracked nuts; and

 separating the uncracked nuts from the thicker range.

72. (Currently Amended) A method of operating a nut shelling plant comprising:

 cracking nuts to produce a cracker product stream;

 sizing the cracker product stream into a plurality of width graduations;

 sorting the largest width graduation by thickness into a thicker range comprising uncracked nuts and substantially whole cracked nuts;

~~The method of operating a nut shelling plant as defined in claim 71 wherein separation the uncracked nuts from the thicker range further comprises~~

 applying the thicker range to a pin sorter which separates the uncracked nuts from the substantially whole cracked nuts; and

 returning substantially only the uncracked nuts to the cracker.

73. (Original) The method of operating a nut shelling plant as defined in claim 71 further comprising returning the substantially whole cracked nuts to the sizing step.